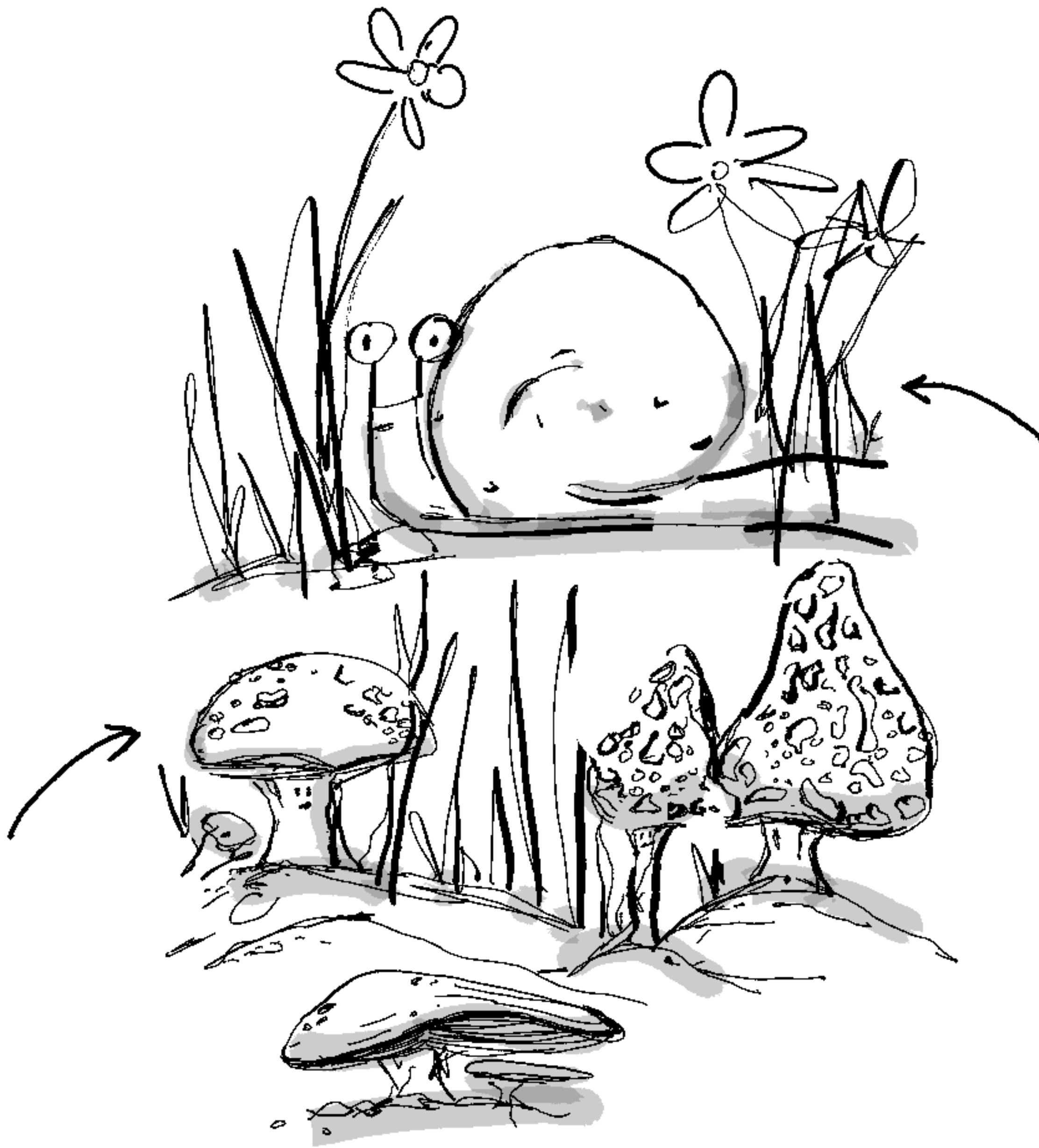


HOW TO NAVIGATE A COMPLEX ORGANIZATION

A VISUAL GUIDE

OREN GOLAN



ALEX PRUKS

PREVIOUS NAMES

- 1 HOW TO BUILD
AN ADAPTIVE
ORGANIZATION
 - 2 HOW TO CHANGE
A COMPLEX
ORGANIZATION
 - 3 HOW TO NAVIGATE
A COMPLEX
ORGANIZATION
 - 4 ?
- ←
CURRENT

WHAT YOU WILL LEARN?

- DESCRIBE WHAT AN ADAPTIVE CHALLENGE IS
- UNDERSTAND WHAT A COMPLEX SYSTEM IS
- RECOGNIZE THE LEVERAGES IN A SYSTEM
- RECOGNIZE THE TRAPS IN A SYSTEM
AND HOW TO AVOID THEM
- EVALUATE THE UNCERTAINTY OF THE
CHALLENGES YOU ARE FACING USING
CYNETIC FRAMEWORK
- GENERATE MULTIPLE STRATEGIES USING
WARDLEY MAPS

RESILIENCY

BLUEFIN TUNA

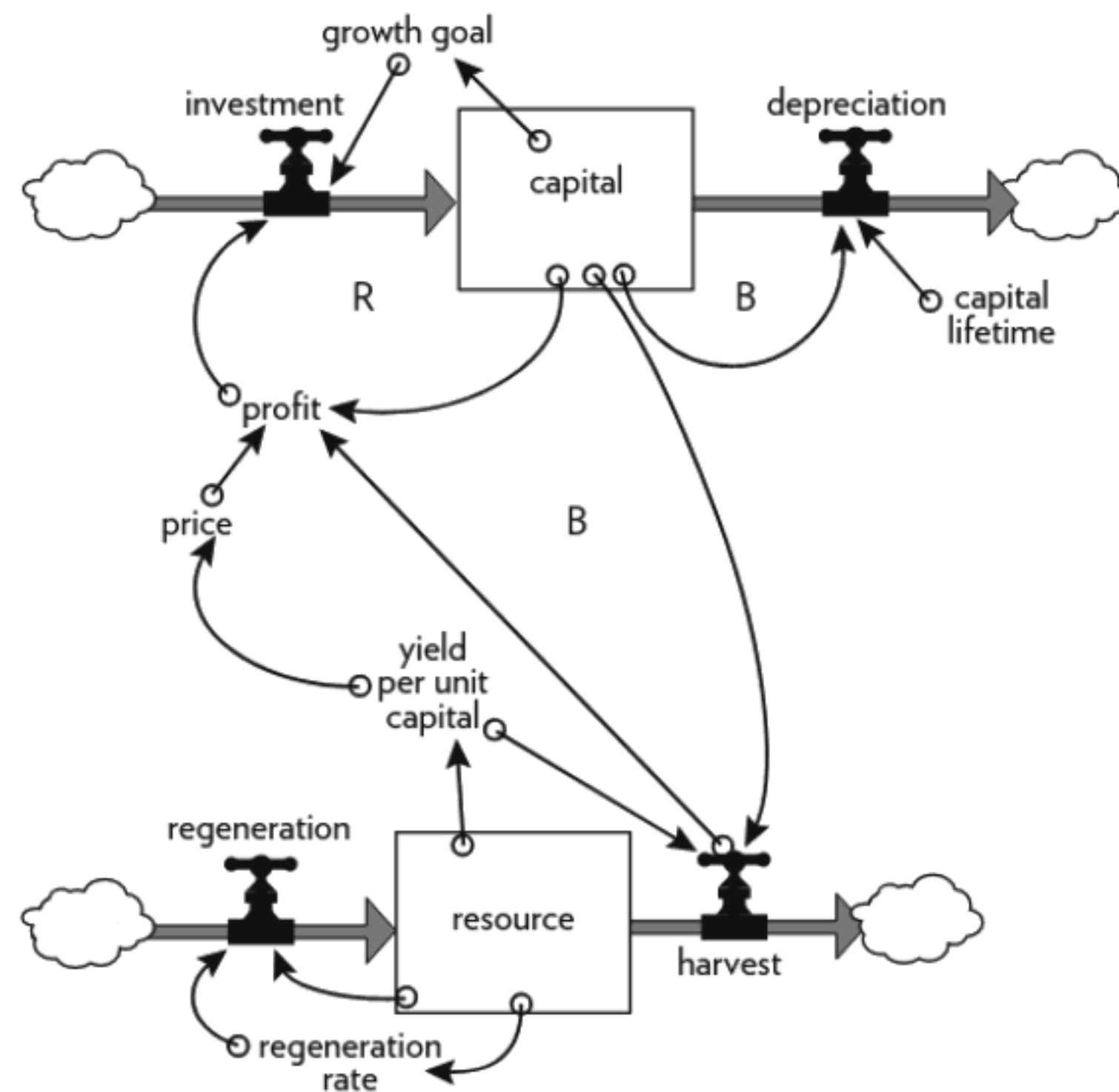


Figure 42. Economic capital with its reinforcing growth loop constrained by a renewable resource.

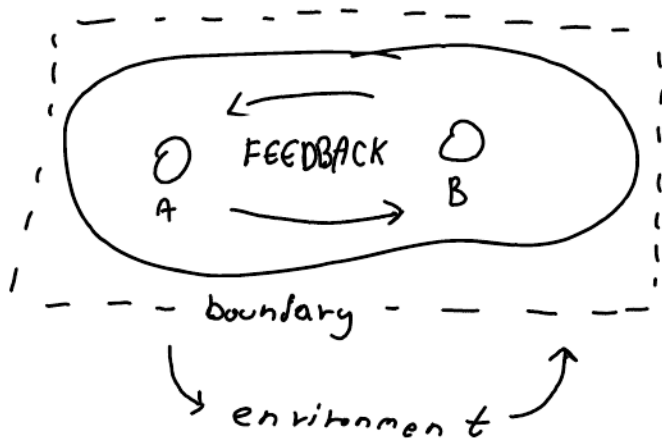
CAUSES OF NON SUSTAINABLE SYSTEM

- MENTAL MODEL / GOALS (GROWTH)
- TECHNOLOGY (SONAR)
- MARKETS (PRICES VISIBLE)
- GOVERNMENT (HELP FISHERIES)

THINKING IN SYSTEMS

SYSTEM

"A SET OF THINGS WORKING TOGETHER
AS PART OF A MECHANISM OR AN
INTERCONNECTING NETWORK"



SYSTEM THINKING & MANAGEMENT SCIENCE

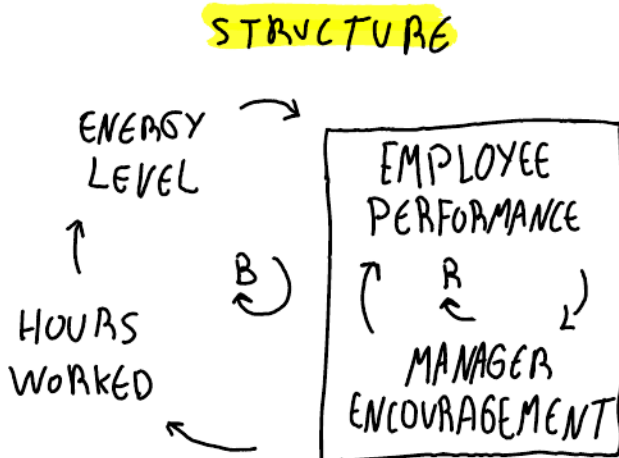
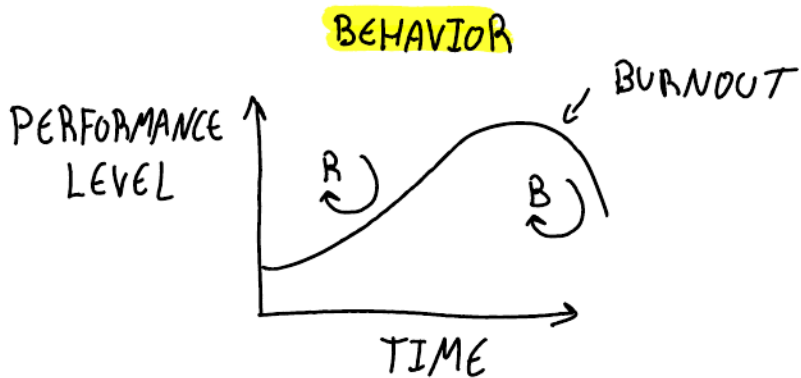
SYSTEM TYPE	PART	WHOLE
MECHANICAL	X	X
LIVING	X	✓
SOCIAL	✓	✓
ENVIRONMENTAL	✓	X

✓ - FREE WILL / AGENCY

X - NO FREE WILL

RUSSEL L. ACKOFF

FEEDBACK LOOPS



TRAP 1

POLICY RESISTANCE
(FIXES THAT FAIL)

EXAMPLES:

ROMANIA, WARS ON DRUGS, UNSUPPORTED LIBS

THE WAY OUT:

LET GO, CHANGE GOAL

THINKING IN SYSTEMS

TRAP 2

TRAGEDY OF THE COMMONS

EXAMPLES:

FISH, FOSSIL FUELS, POPULATION GROWTH

THE WAY OUT:

EDUCATE, DIVIDE THE SHARED RESOURCE,
REGULATE THE COMMON

THINKING IN SYSTEMS

TRAP 3

DRIFT TO LOW PERFORMANCE

EXAMPLES:

FALLING MARKET SHARE, DIRTIER AIR, GAINING
FAT IN SPITE OF DIETING

THE WAY OUT:

ADJUST STANDARDS BASED ON BEST
PERFORMANCE

THINKING IN SYSTEMS

TRAP 4

ESCALATION

EXAMPLES:

ARM RACE, ADS CAMPAIGN

THE WAY OUT:

REFUSE TO COMPETE, BUILD A SYSTEM
WITH BALANCING LOOPS TO CONTROL THE
ESCALATION

THINKING IN SYSTEMS

TRAP 5

SUCCESS TO THE SUCCESSFUL

EXAMPLES:

EXTINCTION OF SPECIES, NUMBER OF CAR BRANDS AND NEWSPAPERS

THE WAY OUT:

POLICIES THAT LEVEL THE PLAYING FIELD
(TAX, UNIONS, EQUAL HEALTHCARE & EDUCATION)

THINKING IN SYSTEMS

TRAP 6

ADDICTION

EXAMPLES:

FAMILIES DELEGATING CARE FOR ELDERLY,
RELYING ON VACCINE & MEDICATION

THE WAY OUT:

HELP A SYSTEM TO RESTORE ITS ABILITY
TO SOLVE ITS PROBLEMS, THEN REMOVE YOURSELF

THINKING IN SYSTEMS

TRAP 7

RULE BEATING

EXAMPLES:

SPENDING AT THE END OF THE YEAR, POISON
ENDANGERED SPECIES

THE WAY OUT:

REDESIGN RULES TO TURN THE SELF
ORGANIZATION OF THE SYSTEM IN THE
DIRECTION OF ACHIEVING THE PURPOSE
OF THE RULES

THINKING IN SYSTEMS

TRAP 8

SEEKING THE WRONG GOAL

EXAMPLES:

GDP DOES NOT COUNT FOR WELFARE, EQUITY,
JUSTICE. MEASURING GOOD EDUCATION BY MONEY SPENT

THE WAY OUT:

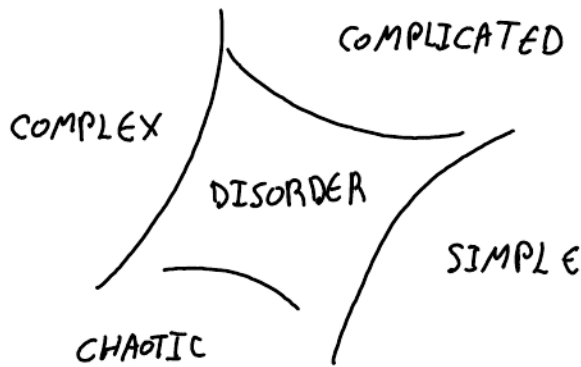
SET GOALS THAT REFLECT THE REAL WELFARE
OF THE SYSTEM

THINKING IN SYSTEMS

CYNEFIN

A FRAMEWORK FOR NAVIGATING
UNCERTAINTY

UNPREDICTABLE WORLD



PREDICTABLE WORLD

DAVE SNOWDEN

Complex

Probe - Sense - Respond

Emergent Practice

Enabling Constraints

↓
A/B
TEST

DISARM
CONFLICT

LEADING
PEOPLE

INCREASE
INNOVATION

PARENTING

Complicated

Sense - Analyse - Respond

Good Practice

Governing Constraints

BUILD CAR

PAY TAXES

Disorder

Chaotic

Act - Sense - Respond

Novel Practice

No effective Constraints

↓
ROLL BACK

FIRE!

PRODUCTION
SERVERS
ARE DOWN

Simple

Sense - Categorise - Respond

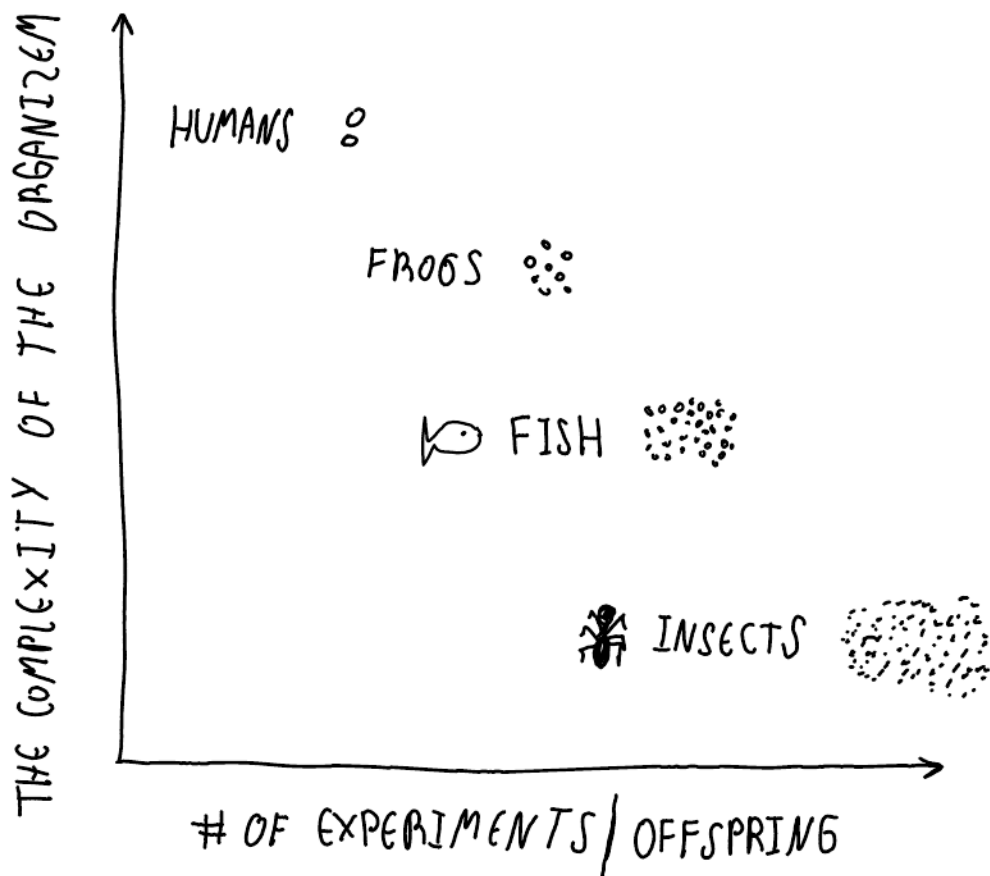
Best Practice

Fixed Constraints

CHECKLIST

CHARGE
PHONE

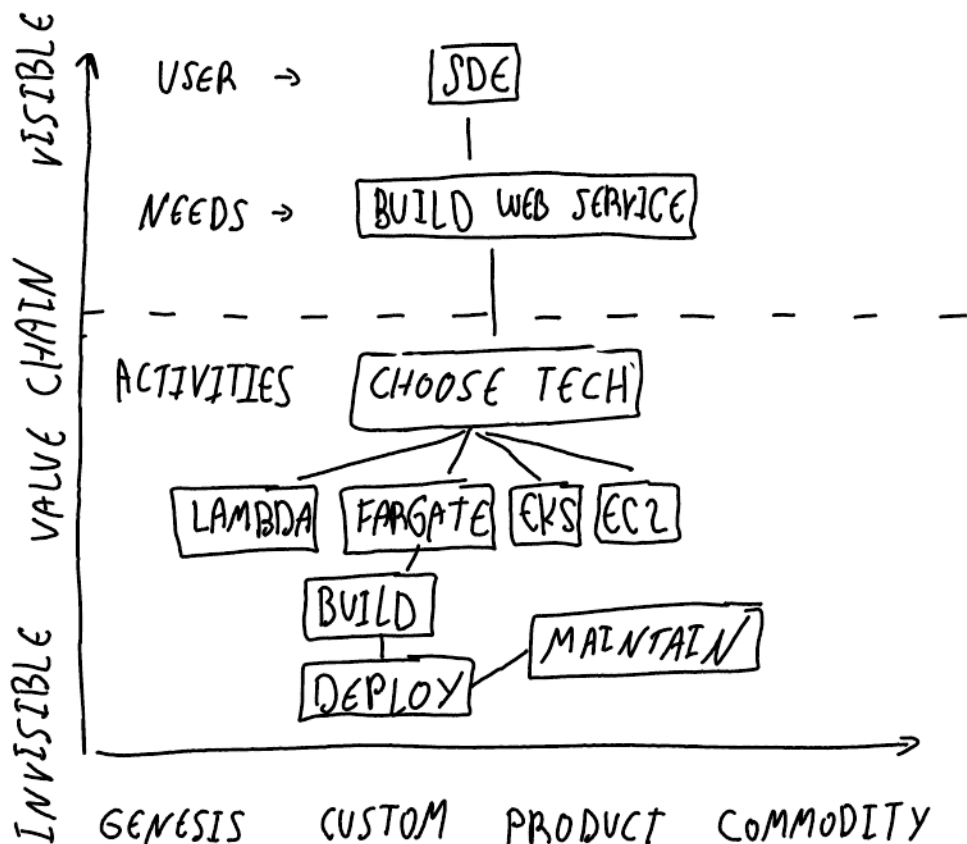
HOW MANY EXPERIMENTS



MAKING THINGS WORK

WARDLEY MAPS

TOPOGRAPHICAL INTELLIGENCE IN BUSINESS



RESOURCES

Books:

THINKING IN SYSTEMS

MAKING THINGS WORK

GOOD STRATEGY BAD STRATEGY

TEAM OF TEAMS

AGENDASHIFT

TURN THE SHIP AROUND

CONNECT: BUILDING EXCEPTIONAL RELATIONSHIPS

NONVIOLENT COMMUNICATION

AN EVERYONE CULTURE: BECOMING A DELIBERATELY

DEVELOPMENTAL ORGANIZATION

x

chess



✓

gardening



RESOURCES

OTHER:

WARDLEY MAPS

CYNEFIN

CLEAN LANGUAGE

OPEN.GITHUB.IO

ADVISORS

AJ BUBB

KEVIN WANG

PHIL GOCHENOUR

RAN BARBON

THOMAS LUNDBY